



Please type a plus sign (+) inside this box +

Please type a plus sign (+) inside this box + PTO/SB/21 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

		Application Number	10/609,329		
TRANS	SMITTAL	Filing Date	Jun 27, 2003		
FC	ORM	First Named Inventor	Batterberry		
(to be used for all corre-	espondence after initial filing)	Group Art Unit	2857		
		Examiner Name	CHARIOUI, MOHAMED		
Total Number of Page	es in This Submission	Attorney Docket Number	MS1-1479US		
	ENCL	OSURES (check a	all that apply)		
Fee Transmittal Form Fee Attached  Amendment / Reply  After Final  Affidavits/declaratio  Extension of Time Request  Express Abandonment Re	Drawing Licensin Petition Provisio Power of Change Address Termina Request	g-related Papers  to Convert to a nal Application of Attorney, Revocation of Correspondence	After Allowance Communication to Group Appeal Communication to Board of Appeals and Interferences Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) Proprietary Information  Status Letter  Other Enclosure(s) (please identify below): PTO-1449; reference copies (39); return receipt postcard		
Certified Copy of Priority	CD, Nu	mber of CD(s)			
Document(s)  Response to Missing Parts Incomplete Application  Response to Missing under 37 CFR 1.52	ng Parts				
	SIGNATURE OF APPLI	CANT, ATTORNEY, OR A	GENT		
Firm or Individual name Allan	T. Sponseller, Reg. No. 38,3	18			
Signature	17:5				
Date 5/13/04					
	CERTIFICA	ATE OF MAILING			
I hereby certify that this corresponde an envelope addressed to: Commiss			vith sufficient postage as first class mail in 0 on this date:		
Typed or printed name Signature	Mianne Gehlen  MUMUL DIM	) Date	T 5/13/04		

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

PTO/SB/17 (10-03)
Approved for use through 07/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
o a collection of information unless it displays a valid OMB control number.

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERC the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

F	EE .	ΓR	AN	SM	IT	TAL
	f	or	FY	200	)4	

Effective 10/01/2003. Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 0.00

Complete if Known				
Application Number	10/609,329			
Filing Date	Jun 27, 2003			
First Named Inventor	Batterberry			
Examiner Name	CHARIOUI, MOHAMED			
Art Unit	2857			
Attorney Docket No.	MS1-1479US			

METH	OD OF PA	YMENT (check all tha	t apply)	FEE CALCULATION (continued)					
Check	Credit card	Money Oth	er None	3. A	DDITI	ONAL	FEE	S	
Deposit	Account:	— Older —			Entity	ĺ			
Deposit		40.0700		Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
Account Number		12-0769		1051	130	2051		Surcharge - late filing fee or oath	
Deposit Account	Le	ee & Hayes, PLLC		1052	50	2052	25	Surcharge - late provisional filing fee or	
Name	L	•		1053	130	1053	130	cover sheet Non-English specification	
	s authorized t (s) indicated b	o: (check all that apply) elow	overpayments	1812	2,520	1812	2,520	For filing a request for ex parte reexamination	
		e(s) or any underpayment of		1804	920*	1804	920*	Requesting publication of SIR prior to	
		elow, except for the filing	` '	1005	1.840*	1005	1 040*	Examiner action Requesting publication of SIR after	
to the above-id		-	,	1805	1,040	1605	1,040	Examiner action	
	FEE C	CALCULATION		1251	110	2251	55	Extension for reply within first month	
1. BASIC F	LING FEE			1252	420	2252	210	Extension for reply within second month	
Large Entity S		5 0	Foo Doid	1253	950	2253	475	Extension for reply within third month	
	Fee Fee Code (\$)	Fee Description	Fee Paid	1254	1,480	2254	740	Extension for reply within fourth month	
1001 770	2001 385	Utility filing fee		1255	2,010	2255	1,005	Extension for reply within fifth month	
1002 340	2002 170	Design filing fee		1401	330	2401	165	Notice of Appeal	
1003 530	2003 265	Plant filing fee		1402	330	2402	165	Filing a brief in support of an appeal	
1004 770	2004 385	Reissue filing fee		1403	290	2403	145	Request for oral hearing	
1005 160	2005 80	Provisional filing fee			1,510	1451	•	Petition to institute a public use proceeding	
1	!	SUBTOTAL (1) (\$) 0	.00	1452	110	2452	55	Petition to revive - unavoidable	
2 FYTRA	L AIM FEE	S FOR UTILITY AN	D REISSLIE	1453	1,330	2453	665	Petition to revive - unintentional	
Z. EXTINA		Fee fro	om		1,330	2501		Utility issue fee (or reissue)	
Total Claims		Extra Claims below	Fee Paid	1502	480	2502		Design issue fee	
Independent			T THE	1503	640	2503		Plant issue fee	
Claims Multiple Deper			ĭ	1460	130	1460		Petitions to the Commissioner	
Large Entity	Small Entity	·		1807	50	1807		Processing fee under 37 CFR 1.17(q)	
Fee Fee	Fee Fee	Fee Description		1806	180	1806		Submission of Information Disclosure Stmt Recording each patent assignment per	
Code (\$) 1202 18	Code (\$) 2202	9 Claims in excess of 20	<b>,</b>	8021	40	8021	1 40	property (times number of properties)	
1202 16	2202			1809	770	2809	385	Filing a submission after final rejection (37 CFR 1.129(a))	
1203 290	2203 14	5 Multiple dependent cla	im, if not paid	1810	770	2810	385	For each additional invention to be	
1204 86	2204 4	3 ** Reissue independer over original patent	nt claims	1801	770	2801	385	examined (37 CFR 1.129(b))  Request for Continued Examination (RCE)	
1205 18	2205	** Reissue claims in e	xcess of 20	1802	900	1802	900	'	$\vdash$
.200 ,0	1	and over original par	tent			ı		of a design application	ļ
	SU	BTOTAL (2) (\$)	0.00		fee (sp				
**or number	r previously pa	id, if greater, For Reissues		*Kedi	iced by	Rasic	riling F	ee Paid SUBTOTAL (3) (\$) 0.00	

SUBMITTED BY (Complete (if applicable))

Name (Print/Type) Allan T. Sponseller Registration No. (Attorney/Agent) 38,318 Telephone (509) 324-9256

Signature Date 5//3/04

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



Date: 5/13/04

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Serial No.	10/609,329
Filing Date	
Confirmation No	7914
Inventorship	Batterberry
Applicant	Microsoft Corporation
Group Art Unit	2857
Examiner	CHARIOUI, MOHAMED
Attorney's Docket No	MS1-1479US
Title: Midstream Determination of Varying Bandwid	lth Availability

INFORMATION DISCLOSURE STATEMENT

References -- See Attached Form PTO-1449

#### **REMARKS**

The citations listed, copies attached, are submitted in compliance with the duty of disclosure defined in 37 CFR §1.56. The Examiner is requested to make these citations of official record in this application.

Respectfully Submitted,

Allan T. Sponseller Reg. No. 38,318

e t	уре а	plus sign (	+) inside	this	box	→	+
-----	-------	-------------	-----------	------	-----	---	---



Substitute for form 1449A/PTO

Sheet

#### INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

4 of 1

Complete if Known					
Application Number	10/609,329				
Filing Date	Jun 27, 2003				
First Named Inventor	Batterberry				
Group Art Unit	2857				
Examiner Name	CHARIOUI, MOHAMED				
Attorney Docket Number	MS1-1479US				

U.S. PATENT DOCUMENTS								
Examiner Initials*	Cite No.1	1 Number .	ment Code² nown)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
		2002/0048448		Daniels	04-25-2002			
		6,327,421		Tiwari et al.	12-04-2001			
		6,014,706		Cannon et al.	01-11-2000			
		6,314,492		Alien et al.	11-06-2001			
		5,787,472		Dan et al.	07-28-1998			
		5,995,705		Lang	11-30-1999			
		5,978,567		Rebane et al.	11-02-1999			
		5,963,202		Polish	10-05-1999			
		5,710,970		Walters et al.	01-20-1998			
		5,440,334		Walters et al.	08-08-1995			
		5,262,875		Mincer et al.	11-16-1993			
		5,164,839		Lang	11-17-1992			
		5,057,932		Lang	10-15-1991			
		4,963,995		Lang	10-16-1990			
		5,568,181		Greenwood et al.	10-22-1996			
		5,996,015		Day et al.	11-30-1999			
		6,111,567		Savchenko et al.	08-29-2000			
		6,343,298		Savchenko et al.	01-29-2002			
		5,835,495		Ferriere	11-10-1998			
		6,292,834		Ravi et al.	09-18-2001			

	FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No.1	Office <sup>3</sup>	Foreign Patent Do Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T6	
						1			
								T	
		<del>  </del>						T	
				1				T	
					·				
								<u> </u>	
								<u> </u>	
				1 1		1 1			

Examiner	Date	
Signature	Considered	

<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.



<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Please type a plus sign (+) inside this box	→	+
---------------------------------------------	---	---



Substitute for form 1449A/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 2 of 4

Complete if Known					
Application Number	10/609,329				
Filing Date	Jun 27, 2003				
First Named Inventor	Batterberry				
Group Art Unit	2857				
Examiner Name	CHARIOUI, MOHAMED				
Attorney Docket Number	MS1-1479US				

	U.S. PATENT DOCUMENTS							
Examiner Initials*	Cite No.1	I Mumber	ocument Kind Code <sup>2</sup> (If known)	Name of Patentee or Applicant	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
		6,041,345		Levi et al.	03-21-2000	-		
		2003/0236902	2	Weiss et al.	12-25-2003			
		2004/000310	1	Roth et al.	01-01-2004			
		2003/0236912	2	Klemets et al.	12-25-2003			
						_		
		<u></u>						
					ļ			
			$\bot$					
						<u>-</u>		

	FOREIGN PATENT DOCUMENTS									
Examiner Initials	Cite No.1	1	Foreign Patent Do		Name of Patentee or	Date of Publication of	Pages, Columns, Lines, Where Relevant			
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)	Applicant of Cited Document	Cited Document MM-DD-YYYY	Passages or Relevant Figures Appear	T⁵		
			_							
					·			$\sqcup$		

_		
Examiner	Date	
Signature	Considered	

<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.



<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



Complete if Known Substitute for form 1449B/PTO **Application Number** 10/609,329 INFORMATION DISCLOSURE Filing Date Jun 27, 2003 STATEMENT BY APPLICANT **First Named Inventor** Batterberry 2857 **Group Art Unit** CHARIOUI, MOHAMED (use as many sheets as necessary) **Examiner Name** of Attorney Docket Number MS1-1479US 3 4 Sheet

******		NON PATENT LITERATURE DOCUMENTS	_
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
-		PAKNIKAR, Shantanu, et al. "A Caching and Streaming Framework for Multimedia," ACM Multimedia 2000, Los Angeles, CA; pp. 13-20.	
		GUO, Katherine, et al. "RCache: Design and Analysis of Scalable, Fault Tolerant Multimedia Stream Caching Schemes," Scalability and Traffic Control in IP Networks, Proceedings of SPIE Vol. 4526, (2001); pp. 68-86.	
		ABOOBAKER, N., et al., "Streaming Media Congestion Control Using Bandwidth Estimation," Lecture Notes in Computer Science, 2002, vol. 2496, pp. 89-100.	
		LIEFOOGHE, P., et al., "An Architecture for Seamless Access to Multicast Content," Proceedings of the 26th Annual IEEE Conference on Local Computer Networks, November 8, 2000, pp. 488-494.	
		BRAUN, T., et al., "Multicast for Small Conferences," Proceedings of the Sixth IEEE Symposium on Computers and Communications, July 3, 2001, pp. 145-150.	
2		FLEISCHMAN, E., "WAVE and AVI Codec Registries," Network Working Group Request for Comments: 2361, The Internet Society, June 1998, pp. 1-71.	
		CAMARILLO, G., et al., "Grouping of Media Lines in the Session Description Protocol (SDP)," Network Working Group Request for Comments: 3388, The Internet Society, December 2002, pp. 1-21.	
		HANDLEY, M., et al., "SDP: Session Description Protocol," Network Working Group Request for Comments: 2327, The Internet Society, April 1998, pp. 1-42.	
		"Advanced Systems Format (ASF) Specification," Revision 01.20.01e, Microsoft Corp., September 2003, pp. i-vi and 1-93.	
		SCHULZRINNE, H., et al., "RTP: A Transport Protocol for Real-Time Applications," Network Working Group Request for Comments: 3550, July 2003, pp. 1-104.	
		MUUSS, M., "The Story of the PING Program," October 18, 1999, retrieved on 4/6/04 from the Internet Archive at <a href="http://web.archive.org/web/19991018225218/ftp.arl.mil/~mike/ping.htm">http://web.archive.org/web/19991018225218/ftp.arl.mil/~mike/ping.htm</a> , 3 pages.	

Examiner		Date	
Signature		Considered	

<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.



<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



Substitute for form 1449B/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 4 of 4

Complete if Known					
Application Number	10/609,329				
Filing Date	Jun 27, 2003				
First Named Inventor	Batterberry				
Group Art Unit	2857				
Examiner Name	CHARIOUI, MOHAMED				
Attorney Docket Number	MS1-1479US				

	NON PATENT LITERATURE DOCUMENTS							
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²					
		MUUSS, M., "The Research Interests of Mike Muuss," October 8, 1999, retrieved on 4/6/04 from the Internet Archive at <a href="http://web.archive.org/web/19991008020453/ftp.arl.mil/~mike/">http://web.archive.org/web/19991008020453/ftp.arl.mil/~mike/</a> , 2 pages.						
		FIELDING R. et al, "Hypertext Transfer Protocol HTTP/1.1," Network Working Group Request for Comments: 2616; The Internet Society (June 1999); Category: Standards Track. pp. 1-176.						
		SCHULZRINNE, H., et al., "Real Time Streaming Protocol (RTSP)," Network Working Group Request for Comments: 2326; The Internet Society (April 1998). pp. 1-92.						
		JIN, S., et al. "Accelerating Internet Streaming Media Delivery using Network-Aware Partial Caching," 2002 IEEE, pp. 153-160.						
Evaminer		Date	<del></del>					

Examiner	Date	*
Signature	 Considered	

<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.



<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.